Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of the Claims:

1. (Currently Amended) A method comprising the steps of:

directing a primary electron beam to propagate along an optical axis through a column;

impinging the primary electron beam on an object, thereby producing both low-energy and high-energy electrons resulting from at least one of reflection and scattering of the primary electron beam from the object, each of the produced low-energy and high-energy electrons having an initial trajectory with respect to the object;

detecting a first portion of the produced high-energy electrons by multiple in-lens detectors;

directing, by introducing a substantial electrostatic field, a trajectory of the produced low-energy electrons and a second portion of the produced high-energy electrons towards an inner lens detector assembly, wherein the initial trajectory of the second portion of the produced high-energy electrons is substantially coincident with the optical axis; ~~and~~

detecting the directed low-energy electrons and the second portion of high-energy electrons by the inner lens detector assembly; and

controlling a division of the low-energy and high-energy electrons between the multiple in-lens detectors and the inner lens detector assembly by modifying the substantial electrostatic field and modifying a distance between the column and the object.

2. (Previously Presented) The method of claim 1 wherein introducing a substantial electrostatic field comprises introducing a first voltage potential difference between the object and a first portion of the column and introducing a second voltage potential difference between a second portion of the column and the object.

3. (Previously Presented) The method of claim 2 wherein the first portion of the column is positioned below the second portion and wherein the first voltage potential difference is smaller than the second voltage potential difference.

4. (Previously Presented) The method of claim 1 further comprising:

receiving detection signals corresponding to at least one of the low-energy electrons, the first portion of high-energy electrons, and the second portion of high-energy electrons; and

processing the received detection signals to provide an indication about a defect or a process variation.

5. (Currently Amended) The method of claim 1 further comprising a step of varying the substantial electrostatic field to alter one or more collection zones of the multiple ~~interior~~ in-lens detectors.

6 - 8. (Cancelled)

9. (Previously Presented) The method of claim 1 wherein an inspected area of the object is positioned within the substantial electrostatic field.

10. (Previously Presented) The method of claim 1 further comprising a preliminary step of determining a measurement angle between the primary electron beam and the object.

11. (Original) The method of claim 10 wherein the measurement angle ranges between acute angles and obtuse angles.

12. (Original) The method of claim 1 wherein detected electrons include electrons from a lower portion of a high aspect ratio hole.

13. (Currently Amended) A system comprising:

means for directing a primary electron beam to propagate along an optical axis through a column;

means for impinging the primary electron beam on an object, thereby producing ~~the~~ both high-energy and low-energy electrons resulting from at least one of reflection and scattering of the primary electron beam from the object, each of the produced high-energy and low-energy electrons having an initial trajectory with respect to the object; ~~and~~

multiple in-lens detectors ~~for detecting~~ configured to detect a first portion of the produced high-energy electrons; ~~and~~

means for directing, by the introduction of a substantial electrostatic field, a trajectory of the produced low-energy electrons and a second portion of the produced high-energy electrons towards an inner lens detector assembly, wherein the initial trajectory of the second portion of the produced high-energy electrons is substantially coincident with the optical axis; ~~and~~

~~an~~ the inner lens detector assembly ~~for detecting~~ configured to detect the directed low-energy electrons and the second portion of high-energy electrons; and

means for controlling a division of the low-energy and high-energy electrons between the multiple in-lens detectors and the inner lens detector assembly by modifying the substantial electrostatic field and modifying a distance between the column and the object.

14. (Previously Presented) The system of claim 13 wherein the column comprises a first portion that is associated with a first voltage level and a second portion that is associated with a second voltage level.

15. (Previously Presented) The system of claim 14 wherein the first portion of the column is positioned below the second portion.

16. (Cancelled)

17. (Previously Presented) The system of claim 13 further adapted to vary the substantial electrostatic field to alter one or more collection zones of the multiple in-lens detectors.

18. (Cancelled)

19. (Previously Presented) The system of claim 13 wherein an inspected area of the object is positioned within the substantial electrostatic field.

20. (Previously Presented) The system of claim 19 further capable of introducing a tilt between the primary electron beam and the inspected area.

21. (Previously Presented) The system of claim 13 wherein the produced electrons include electrons from a lower portion of a high aspect ratio hole.